

Rec'd PCT/PTO 10 JAN 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
26 February 2004 (26.02.2004)

PCT

(10) International Publication Number  
WO 2004/016073 A3

(51) International Patent Classification<sup>7</sup>: A01H 5/00, 5/10, C12N 15/60, 9/88

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/IB2003/004645

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(22) International Filing Date: 9 July 2003 (09.07.2003)

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/394,991 10 July 2002 (10.07.2002) US

(88) Date of publication of the international search report: 22 July 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(71) Applicant (for all designated States except US): THE DEPARTMENT OF AGRICULTURE, WESTERN AUSTRALIA [AU/AU]; 3 Baron-Hay Court, South Perth, Western Australia 6151 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BOWRAN, David [AU/AU]; 625 Forrest Street, Sawyers Valley, Western Australia 6074 (AU). BARCLAY, Iain [AU/AU]; 22 Barbican Street, Shelley, Western Australia 6148 (AU). JOSE, Kevin, F. [AU/AU]; 78 Marlock Drive, Greenwood, Western Australia 6024 (AU).

WO 2004/016073 A3

(54) Title: WHEAT PLANTS HAVING INCREASED RESISTANCE TO IMIDAZOLINONE HERBICIDES

(57) Abstract: The present invention is directed to plants having increased resistance to an imidazolinone herbicide. More particularly, the present invention includes wheat plants and triticale plants containing at least one IMI nucleic acid such as an imidazolinone resistant Brookton BR-8 or Krichauff K-42 cultivar. The present invention also includes seeds produced by these wheat plants and triticale plants and methods of controlling weeds in the vicinity of these wheat plants.